We claim:

1. A machining center comprising:

a machine base provided with rails;

a workpiece support proximal to said machine base and adapted to hold at least one workpiece to be machined;

a workpiece holder on said machine base movable on said rails on said base between a pick-up position in which a workpiece is acquired by said holder from said workpiece support, to a machining station in which a workpiece on said holder is machined and back to a position in which said workpiece holder can release a machined workpiece onto said workpiece support, said holder retaining said workpiece between said rails during movement between said positions and said machining station;

at least two machining devices on said base at said machining station having respective machining tools rotatable about respective axes on the respective device;

drives for relatively displacing said holder and said machining devices to bring said workpiece into machining relationship with said tools at respective machining positions of each of said devices at the machining station; and

respective tool-change positions for each of said machining devices spaced from the respective machining position in a direction parallel to a respective rotation axis of the respective device whereby each of said devices is shiftabl

parallel to the respective rotation axis from the resp ctive machining position to the respective tool-change position.

2. The machining center defined in claim 1 wherein said workpiece holder comprises a workpiece spindle provided with a jaw chuck adapted top grip said workpiece.

3. The machining center defined in claim 2 wherein said workpiece spindle is mounted on a cross slide displaceable on said rails and on a guide perpendicular to said rails.

4. The machining center defined in claim 3 wherein said spindle is swingable about an axis on said holder perpendicular to said rails and to said guide.

5. The machining center defined in claim 3 wherein said workpiece holder is provided with a drive imparting a feed movement to said workpiece for machining thereof by a respective one of said tools at said machining station.

6. The machining center defined in claim 1 wherein each of said machining devices is provided with a drive capable of presenting the respective tool at the respective machining position and retracting the respective tool into a respective tool-change position.

7. The machining center defined in claim 6, further comprising a support element carrying respective guides for said machining devices enabling the displacement of said machining devices between the respective machining position and the respective tool-change position.

8. The machining center defined in claim 7 wherein said support element is rigid with or one piece with said base.

9. The machining center defined in claim 8 wherein the guides for said machining devices are disposed outside said machining station.

10. The machining center defined in claim 1, further comprising a shield preventing contaminants from said machining station from passing into said tool-change positions.

11. The machining center defined in claim 1 wherein said shield is a dirt deflector located between the machining and tool-change positions.

12. The machining center defined in claim 7 wherein said machining devices are located on opposite sides of said support element.

13. The machining center defined in claim 1, further comprising at least one tool magazine accessible at said tool-change positions for supplying replacement tools to said tool-change positions.

14. The machining center defined in claim 13 wherein each of said machining devices is provided with a respective tool magazine.

15. The machining center defined in claim 13, further comprising a respective tool changer at each of said tool-change positions for removing a tool from a magazine and inserting it into the respective machining device.

16. The machining center defined in claim 1, further comprising a transport device for advancing workpieces in succession into said pickup position and carrying a machined workpiece away from said pickup position, whereby each workpiece is picked up and dropped off by said workpiece holder at the same place.